

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

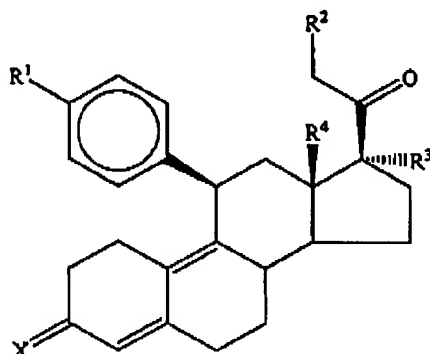
PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 Claim 1 (currently amended): A compound having the general formula:



2
3 wherein:

4 R^1 is a member selected from the group consisting of $-OCH_3$, $-SCH_3$, $-N(CH_3)_2$,
5 $-NHCH_3$, $-NC_4H_8$, $-NC_5H_{10}$, $-NC_4H_8O$, $-CHO$, $-CH(OH)CH_3$, $-C(O)CH_3$, $-O(CH_2)_2N(CH_3)_2$,
6 $-O(CH_2)_2NC_4H_8$, and $-O(CH_2)_2NC_5H_{10}$;

7 R^2 is a member selected from the group consisting of hydrogen, halogen, alkyl,
8 acyl, hydroxy, alkoxy, acyloxy, alkylcarbonate, cypionyloxy, S-alkyl, $-SCN$, S-acyl, and
9 $-OC(O)R^6$, wherein R^6 is a member selected from the group consisting of alkyl, alkoxy ester and
10 alkoxy;

11 R^3 is a member selected from the group consisting of alkyl-alkoxy, alkoxy and
12 acyloxy;

13 R^4 is a member selected from the group consisting of hydrogen and alkyl;

14 X is a member selected from the group consisting of $=O$ and $=N-OR^5$, wherein R^5
15 is a member selected from the group consisting of hydrogen and alkyl; and

16 wherein:

Appl. No. 09/526,855

PATENT

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

17 if R¹ is -C(O)CH₃, -OCH₃, -SCH₃, -N(CH₃)₂ or -NHCH₃, R² is hydrogen, R³ is
18 acetyloxy and R⁴ is methyl, then X is other than =O and =N-OR⁵, wherein R⁵ is methyl, and
19 ~~if R¹ is -N(CH₃)₂, R² is hydroxy, R⁴ is alkyl and X is =O, then R³ is other than~~
20 ~~hydroxy.~~

1 Claim 2 (original): The compound in accordance with claim 1, wherein R¹ is a
2 member selected from the group consisting of -N(CH₃)₂, -NC₄H₈, -NC₅H₁₀, -NC₄H₈O,
3 -C(O)CH₃, -O(CH₂)₂N(CH₃)₂, -O(CH₂)₂NC₄H₈, and -O(CH₂)₂NC₅H₁₀.

1 Claim 3 (previously presented): The compound in accordance with claim 1,
2 wherein R² is a member selected from the group consisting of hydrogen, acyloxy, alkoxy, -SAc,
3 -SCN, -OC(O)CH₂N(CH₃)₂, and -OC(O)R⁶, wherein R⁶ is a member selected from the group
4 consisting of alkyl, alkoxy ester and alkoxy.

1 Claim 4 (withdrawn): The compound in accordance with claim 3, wherein R² is
2 -OC(O)R⁶ and R⁶ is a member selected from the group consisting of -CH₂CH₃, -CH₂OCH₃ and
3 -OCH₃.

1 Claim 5 (original): The compound in accordance with claim 1, wherein R² is an
2 alkoxy selected from the group consisting of methoxy, ethoxy, vinyloxy, ethynyloxy and
3 cyclopropyloxy.

1 Claim 6 (previously presented): The compound in accordance with claim 1,
2 wherein R³ is a member selected from the group consisting of alkoxy and acyloxy.

1 Claim 7 (original): The compound in accordance with claim 1, wherein R⁴ is
2 alkyl.

1 Claim 8 (original): The compound in accordance with claim 1, wherein X is =O.

Appl. No. 09/526,855

PATENT

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

1 Claim 9 (withdrawn): The compound in accordance with claim 1, wherein X is
2 =N-OR⁵.

1 Claim 10 (withdrawn): The compound in accordance with claim 1, wherein:
2 R¹ is -N(CH₃)₂;
3 R² is hydrogen;
4 R³ is acyloxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 11 (withdrawn): The compound in accordance with claim 10, wherein R³
2 is acyloxy selected from the group consisting of -OC(O)H, -OC(O)CH₂CH₃ and -OC(O)C₆H₁₃.

1 Claim 12 (withdrawn): The compound in accordance with claim 1, wherein:
2 R¹ is -N(CH₃)₂;
3 R² is hydrogen;
4 R³ is methoxymethyl;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 13 (withdrawn): The compound in accordance with claim 1, wherein:
2 R¹ is -NC₄H₉;
3 R² is hydrogen;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 14 (withdrawn): The compound in accordance with claim 1, wherein:
2 R¹ is -NC₅H₁₀;

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

3 R² is hydrogen;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 15 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₄H₉O;
3 R² is hydrogen;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

Claim 16 (canceled)

1 Claim 17 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -SCH₃;
3 R² is hydrogen;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 18 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is hydrogen;
4 R³ is methoxy;
5 R⁴ is methyl; and
6 X is =O.

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

1 Claim 19 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₅H₁₀;
3 R² is hydrogen;
4 R³ is methoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 20 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₅H₁₀;
3 R² is acetoxy;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 21 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -C(O)CH₃;
3 R² is acetoxy;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 22 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -C(O)CH₃;
3 R² is -SAc;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

Appl. No. 09/526,855

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

PATENT

1 Claim 23 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -C(O)CH₃;

3 R² is methoxy;

4 R³ is methoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 24 (original): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;

3 R² is methoxy;

4 R³ is methoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 25 (original): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;

3 R² is methoxy;

4 R³ is ethoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 26 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₄H₉;

3 R² is methoxy;

4 R³ is methoxy;

5 R⁴ is methyl; and

6 X is =O.

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

1 Claim 27 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₅H₁₀;
3 R² is methoxy;
4 R³ is methoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 28 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₅H₁₀;
3 R² is methoxy;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 29 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -C(O)CH₃;
3 R² is methoxy;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 30 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -O(CH₂)₂N(CH₃)₂;
3 R² is methoxy;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

Appl. No. 09/526,855

PATENT

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

1 Claim 31 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -O(CH₂)₂NC₄H₉;

3 R² is methoxy;

4 R³ is acetoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 32 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -O(CH₂)₂NC₅H₁₀;

3 R² is methoxy;

4 R³ is acetoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 33 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;

3 R² is -OC(O)CH₂CH₃;

4 R³ is acetoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 34 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;

3 R² is -OC(O)CH₂OCH₃;

4 R³ is acetoxy;

5 R⁴ is methyl; and

6 X is =O.

Appl. No. 09/526,855

PATENT

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

1 Claim 35 (withdrawn): The compound in accordance with claim 1, wherein:

2 R^1 is $-N(CH_3)_2$;

3 R^2 is $-OC(O)OCH_3$;

4 R^3 is acetoxy;

5 R^4 is methyl; and

6 X is $=O$.

1 Claim 36 (withdrawn): The compound in accordance with claim 1, wherein:

2 R^1 is $-N(CH_3)_2$;

3 R^2 is $-OCH=CH_2$;

4 R^3 is acetoxy;

5 R^4 is methyl; and

6 X is $=O$.

1 Claim 37 (withdrawn): The compound in accordance with claim 1, wherein:

2 R^1 is $-N(CH_3)_2$;

3 R^2 is $-OCH=CH_2$;

4 R^3 is methoxy;

5 R^4 is methyl; and

6 X is $=O$.

1 Claim 38 (withdrawn): The compound in accordance with claim 1, wherein:

2 R^1 is $-N(CH_3)_2$;

3 R^2 is $-OCH=CH_2$;

4 R^3 is ethoxy;

5 R^4 is methyl; and

6 X is $=O$.

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

1 Claim 39 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is -SCN;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 40 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is -OC(O)H;
4 R³ is -OC(O)H;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 41 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is -OC(O)H;
4 R³ is hydroxy;
5 R⁴ is methyl; and
6 X is =O.

1 Claim 42 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is -OC(O)CH₂N(CH₃)₂;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =O.

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

1 Claim 43 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₅H₁₀;
3 R² is hydrogen;
4 R³ is acetoxy;
5 R⁴ is methyl; and
6 X is =N-OR⁵, wherein R⁵ is hydrogen.

1 Claim 44 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is hydrogen;
4 R³ is methoxy;
5 R⁴ is methyl; and
6 X is =N-OR⁵, wherein R⁵ is hydrogen.

1 Claim 45 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NC₅H₁₀;
3 R² is hydrogen;
4 R³ is methoxy;
5 R⁴ is methyl; and
6 X is =N-OR⁵, wherein R⁵ is hydrogen.

1 Claim 46 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -N(CH₃)₂;
3 R² is methoxy;
4 R³ is methoxy;
5 R⁴ is methyl; and
6 X is =N-OR⁵, wherein R⁵ is hydrogen.

Appl. No. 09/526,855

PATENT

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

1 Claim 47 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NHCH₃;

3 R² is methoxy;

4 R³ is acetoxy;

5 R⁴ is methyl; and

6 X is =O.

1 Claim 48 (withdrawn): The compound in accordance with claim 1, wherein:

2 R¹ is -NHCH₃;

3 R² is acetoxy;

4 R³ is acetoxy;

5 R⁴ is methyl; and

6 X is =O.

Σ
corn
1 Claim 49 (original): A pharmaceutical composition comprising an effective
2 amount of a compound in accordance with claim 1 and a pharmaceutically acceptable excipient.

1 Claim 50 (withdrawn): A method of producing an antiprogestational effect in a
2 patient, said method comprising administering to said patient an effective amount of a compound
3 in accordance with claim 1.

1 Claim 51 (withdrawn): A method of inducing menses in a patient, said method
2 comprising administering to said patient an effective amount of a compound in accordance with
3 claim 1.

1 Claim 52 (withdrawn): A method of treating endometriosis, said method
2 comprising administering to said patient an effective amount of a compound in accordance with
3 claim 1.

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

1 Claim 53 (withdrawn): A method of treating dysmenorrhea, said method
2 comprising administering to said patient an effective amount of a compound in accordance with
3 claim 1.

1 Claim 54 (withdrawn): A method of treating endocrine hormone-dependent
2 tumors, said method comprising administering to said patient an effective amount of a compound
3 in accordance with claim 1.

1 Claim 55 (withdrawn): A method of treating meningiomas, said method
2 comprising administering to said patient an effective amount of a compound in accordance with
3 claim 1.

Σ
COW
1 Claim 56 (withdrawn): A method of treating uterine fibroids in a patient, said
2 method comprising administering to said patient an effective amount of a compound in
3 accordance with claim 1.

1 Claim 57 (withdrawn): A method of inhibiting uterine endometrial proliferation
2 in a patient, said method comprising administering to said patient an effective amount of a
3 compound in accordance with claim 1.

1 Claim 58 (withdrawn): A method of inducing labor, said method comprising
2 administering to a patient an effective amount of a compound in accordance with claim 1.

1 Claim 59 (withdrawn): A method of contraception, said method comprising
2 administering to a patient an effective amount of a compound in accordance with claim 1.

1 Claim 60 (withdrawn): A method of postcoital contraception, said method
2 comprising administering to a patient an effective amount of a compound in accordance with
3 claim 1.

Appl. No. 09/526,855
Amdt. dated March 24, 2004
Reply to Office Action of September 24, 2003

PATENT

1 Claim 61 (previously presented): The compound in accordance with claim 1,
2 wherein:

3 R¹ is -N(CH₃)₂;
4 R² is methoxy;
5 R³ is acetoxy;
6 R⁴ is methyl; and
7 X is =O.

1 Claim 62 (previously presented): The compound in accordance with claim 1,
2 wherein:

Σ 3 R¹ is -N(CH₃)₂;
4 R² is acetoxy;
5 R³ is acetoxy;
6 R⁴ is methyl; and
7 X is =O.

1 Claim 63 (previously presented): The compound in accordance with claim 1,
2 wherein:

3 R¹ is -N(C)H₃)₂;
4 R² is ethoxy;
5 R³ is acetoxy;
6 R⁴ is methyl; and
7 X is =O.

1 Claim 64 (previously presented): The compound in accordance with claim 1,
2 wherein:

3 R¹ is -N(CH₃)₂;

Appl. No. 09/526,855

Amdt. dated March 24, 2004

Reply to Office Action of September 24, 2003

PATENT4 R^2 is $-\text{OC}(\text{O})\text{CH}_2\text{CH}_2\text{C}_5\text{H}_9$;5 R^3 is acetoxy;6 R^4 is methyl; and7 X is $=\text{O}$.

Σ 1 Claim 65 (previously presented): The compound in accordance with claim 1,

2 wherein:

Cov 3 R^1 is $-\text{N}(\text{CH}_3)_2$;4 R^2 is hydroxy;5 R^3 is acetoxy;6 R^4 is methyl; and7 X is $=\text{O}$.